



**Pacific Gas and  
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California Energy Commission  
Docket Office  
Re: Docket Nos. 04-DIST-GEN-1 and 03-IEP-1  
Docket Unit MS-4  
1516 Ninth Street  
Sacramento, CA 95814-5512

Re: Pacific Gas and Electric Company's Comments on the *Recommended Changes to Interconnection Rules - Committee Final Report* issued on January 6, 2005

Dear Commission,

Pacific Gas and Electric Company (PG&E) respectfully submits the following comments regarding the *Recommended Changes to Interconnection Rules - Committee Final Report* (Report) issued on January 6, 2005 by the Integrated Energy Policy Report (IEPR) Committee of the California Energy Commission (Commission) and scheduled for adoption by the Commission on February 2, 2005. PG&E appreciates the opportunity to provide comments on the IEPR Committee recommendations.

### **Metering Issues**

#### **1. When is NGOM Required?**

*The IEPR Committee recommends that Net Generation Output Metering (NGOM) should only be required "when the customer receives publicly-funded incentive payments and/or specific tariff exemptions . . . ." Report pages 1 and 17. As a result, the Report appears to propose to prohibit the NGOM telemetry now required on large generators under ISO tariffs and Rule 21 unless those projects receive publicly funded incentive payments or specific tariff exceptions. However, those large gas fired projects, which can be 50 MW or larger, are the least likely to receive DG subsidies.*

PG&E has previously outlined when and why PG&E requires NGOM and this information is included in a summary form in Appendix A of the Report. PG&E is concerned that the Committee's recommendation does not adequately cover all the areas where NGOM should be required. Two areas in particular also require NGOM: 1) gas

and electric tariff billing as outlined in Appendix A and, as mentioned above,  
2) telemetering.

NGOM is needed for billing, for instance, to bill the gas account serving a generator where there is no dedicated gas meter as outlined in PG&E's G-EG gas tariff. Another need for NGOM is for billing customers taking certain types of supplemental standby service.



NGOM is needed for telemetering on systems larger than 1 MW (or larger than 250 kW on a distribution system operating at less than 10 kV) in order to provide access to real time data when needed to: 1) monitor generation output for larger generators (i.e. let system operators know when a 5 MW generator supporting a 5 MW load trips off line), and 2) help utility planning engineers accurately factor in generation output data in load flow studies. Load flow studies are the tool used by utility planning engineers to determine the most effective way to operate the electric system. Without access to real time data, the load flow study can only be based on the nameplate rating of the generator, which can provide inaccurate results as PG&E plans for future utility facilities or system modifications. Telemetering also provides resource planners with access to more accurate information in real-time for load forecasting which is updated numerous times daily especially during high load periods.

As DG continues to grow, the impact it has on utility grid management and forecasting will also increase. At the same time the Commission is taking steps to encourage a significant increase in today's level of DG, it does not make sense to ratchet back on NGOM requirements designed to keep the utility grid operating smoothly for the benefit of all utility customers. PG&E urges the Committee to expand its recommendation to provide for NGOM "when the customer receives publicly-funded incentive payments and/or specific tariff exemptions **and for billing and telemetering requirements as specified in Appendix A of the Report**" (new language in bold).

## 2. NGOM Meter Standards

*The IEPR Committee recommends that: "In situations where NGOM is required, utility-grade meters are not needed. Non-utility grade meters are acceptable, provided that the meters adhere to the direct access metering provisions outlined in Rule 22." Report page 17.*

In general PG&E's position is that meters used for billing purposes should be utility grade meters that are owned and read by the utility. To the extent the California Public Utilities Commission (CPUC) may determine that third party ownership of meters is appropriate, PG&E urges that all such meters be required to be utility-grade meters and that comprehensive standards such as those adopted in the direct access proceeding be put in place.

PG&E supports designating the Rule 21 working group as the forum for developing tariff rules on NGOM metering issues, including telemetering, for CPUC consideration.

### **Dispute Resolution Process**



The Committee Report proposes three changes to the dispute resolution process. The proposals are:

- Modifications shall be made that will incorporate mediation from the CPUC's Energy Division, tighter timelines for review and resolution, and a clearer identification of technical and process decision makers.
- Additionally, utilities shall be required to provide more detailed technical justification to the disputing party for requirements it proposes to impose, rather than simply relying on a general assertion of a need to protect safety and ensure reliability.
- Some level of information regarding disputes and their resolution shall be made available to the public for the purposes of learning and reducing frequencies of similar disputes in the future.

PG&E has no objection to the first proposal. However, the two other proposals have some potential difficulties, depending on how they are implemented.

#### **1. Explaining Interconnection Requirements**

The Committee proposes that utilities be required to provide a "reasonably detailed justification" for interconnection requirements. PG&E agrees that providing an explanation for technical requirements is an important part of dispute resolution and can help make the interconnection process run smoother. However, there are limits to the information the utility can impart without divulging potentially confidential customer specific or system information. For example, some customers want to compare themselves to other customers and want detailed information about those customers and other system details. PG&E feels that an equitable balance can be struck between the utility's need to protect confidential information and the DG participant's need to know.

In addition, some customers are highly sophisticated about technical engineering issues, and others are not. There have been occasions when customers simply did not understand technical system issues. On occasion, the CPUC and CEC can provide an excellent vehicle for discussion of technical issues that really do have a legitimate basis. While there will continue to be challenges, PG&E continues to gain experience in how to better communicate with DG participants regarding requirements needed to maintain safety and reliability, and is committed to continuing to improve in this area. However, the interconnection process is not suitable for a "cookie-cutter" approach. While two generating units may be similar in type and size, the interconnection requirements for each system can vary substantially depending on the location and the circuit configuration of a particular installation. PG&E opposes any change to Rule 21 that

would limit the utility's authority to take all relevant factors into consideration when determining interconnection requirements.

## 2. Public Disclosure



The introduction to the Committee Report recommends as follows: *"Some level of information regarding disputes and their resolution shall be made available to the public for the purposes of learning and reducing frequencies of similar disputes in the future."* Report page 2. The body of the Report states, *"Public availability of the results of such a dispute, as suggested by the DG developer community however, is slightly more complicated. As PG&E notes, customers are free to disclose the fact publicly that they have had a dispute with the utility. However, utilities are often required to keep customer-specific information confidential. The Committee believes that, in the case of interconnection disputes, there is precedent setting value to some level of public disclosure. Doing so would disseminate lessons learned and reduce the frequency of similar disputes in the future. The Committee seeks additional guidance from the Rule 21 Working Group on balancing these mutual needs, including but not limited to developing an agreed-upon list of items that could be made publicly available."* Report page 26.

PG&E is pleased that the Report recognizes the utility requirement to maintain customer confidentiality. PG&E also hopes that the Committee recognizes that public disclosure of every "dispute" may not achieve a commission goal of expediting interconnection and promoting settlement. PG&E is now interconnecting literally thousands of DG customers per year. Most of these projects move through without controversy. However, there are some customers who have questions or concerns about an initial interconnection study or report. In most cases, a discussion with the customer quickly leads to resolution of the issue, and in some cases, the discussion takes a little longer. Sometimes the customer comes to accept the utility position without change; sometimes the generator customer persuades the utility that its initial response should be revised. It is not clear what in the spectrum of these discussions should be considered as rising to the level of a "dispute." Moreover, many of these issues do not involve issues of broad policy, but only customer specific issues related to the particular equipment and location proposed.

However, when a dispute relates to an area of broad interest, PG&E understands there can be a benefit in providing notice of resolution. For instance, PG&E has already taken steps to provide information to the larger DG community regarding the difficulties posed by interconnections to PG&E's spot network system. As described at the Committee's December 10, 2004 hearing, interconnecting to PG&E's spot network was the basis for the dispute between PG&E and RealEnergy. In September of 2004, PG&E presented its internal bulletin *"Secondary Spot Network System Requirements for Distribution Generation Interconnection"* to the technical section of the CEC's Rule 21 working group. It helps provide insight into the complexity of the protective systems utilities are working with in order to complete spot network interconnections. As the Committee acknowledges in the "Network System" section of the Report (Chapter 6), this effort

continues to challenge utilities nationwide and the Rule 21 working group will continue its efforts in this area in 2005.

Thus, it is not at all clear what is meant by the Committee recommendation that *"Some level of information regarding disputes and their resolution shall be made available to the public..."* PG&E welcomes an ongoing discussion of what types of issues should be considered "disputes;" how customer confidentiality issues should be addressed; whether there should be public disclosure of issues that are customer specific; and where the results should be reported.



### **Initial/Supplemental Interconnection Review Fees**

The Committee Report provides that *"no changes to the fee structure are needed at this time"* and directs that *"an ongoing utility tracking and reporting system shall be established to provide detailed data on interconnection costs and assist regulators in making informed decisions regarding the future allocation of interconnection review costs."* Report page 2.

#### **1. Fee Tracking Requirements**

PG&E has been tracking costs associated with interconnection of distributed generation since the CPUC issued Decision 02-03-057 and plans to continue to do so. PG&E agrees with the Committee recommendation that there be no change to the initial and supplemental fees at this time. However, as described below, PG&E does support making a change to the fees for DG inspections.

#### **2. Changes Needed to Help Reduce Multiple Inspection Trips**

PG&E believes it has provided detailed cost information sufficient to support a change in the fee structure for DG preparallel inspections (PPIs). PG&E data clearly depicts cost overruns due to multiple inspection trips, almost all of which were required due to customer delays. Report pg. 29. While PG&E is not asking the Commission at this time to revise the initial and supplemental review fees (\$800 and \$600, respectively), PG&E does seek Commission support for its proposal to charge generator-applicants who make it necessary for PG&E to perform numerous inspections. Specifically, PG&E proposes that in situations where multiple PPIs are required, the party responsible for the delay or additional trip be required to shoulder the costs of the repeat PPIs. PG&E believes the proposal to be fair and equitable and is pleased that it has garnered some support from the DG community attending past Rule 21 workshops. Implementation of a "repeat" inspection fee would provide an incentive for generator- applicants to be ready for the first inspection. This would both make the process more efficient and help reduce interconnection inspection costs.



### **Net Metering for Systems with “Combined” Technologies**

The issue of multiple generating units subject to differing tariffs interconnecting at a single customer site poses a variety of difficulties. PG&E agrees that the timing, technical, metering and tariff issues for such interconnections are not insurmountable.

Regarding the specific IEPR Committee (and the City of San Diego’s) recommendation that “combined” systems be allowed to export from the net energy metering (NEM) generator while the non-NEM generator is operating, PG&E agrees that this scenario is workable if the customer is willing to bear the cost of the metering involved to enforce the requirements of the NEM program. Specifically, the NEM generator, on an annual basis, should not receive credit for any excess energy exported to the utility. In addition, there must be no exports to the grid from the non-NEM generator. Also, there may be customers who choose to shut down their non-NEM generator in certain circumstances, and the CEC should not develop rules that would prevent them from making such choices.

Finally, PG&E strongly disagrees with the IEPR Committee’s conclusion that, *“the application fees and costs associated with grid infrastructure improvements should be the responsibility of the utility, with the cost recovered through the distribution component of the utility rates.”* Report page 40. This conclusion is inconsistent with CPUC Decision 02-03-057 which determined cost responsibility for various types of interconnections. In summary, the Decision exempts generators eligible for net energy metering under Public Utilities Code Section 2827 from paying for interconnection fees, studies and the cost of distribution system improvements. D.02-03-057, Ordering Paragraph 2. Non-NEM generators are not exempt from these costs. “As set forth in Rule 21, customers who install generation are responsible for all interconnection facility costs and the next three cost categories as well.” Id. at page 3. The “next three cost categories” include: distribution system improvement costs, interconnection study costs, and interconnection application review fees. “This allocation of cost responsibility is not in dispute for distributed generators that do not meet the requirements of Section 2827.” Id. The Committee’s recommendation is inconsistent with the cost responsibility already determined by the CPUC and should not be included in the Report.

### **Interconnection Rules for Network Systems**

PG&E supports the IEPR Committee endorsement of the Rule 21 working group proposal to take the eight-step approach outlined in the Report. PG&E has agreed to take the lead on some of these items. PG&E also plans to participate in the Distributed Utility Integrated Test (DUIT) study, the Institute of Electrical and Electronic Engineers (IEEE 1547) efforts in this area, along with other steps to gain further knowledge about this type of interconnection.

**Conclusion**

PG&E appreciates having the opportunity to provide these comments for the Commission's consideration and looks forward to continuing participation in the Commission's Rule 21 working group.



Sincerely,

A handwritten signature in black ink, appearing to read "Stacy W. L. Walter".

Stacy W. L. Walter

Cc: William J. Keese, Chairman  
James D. Boyd, Commissioner  
John L. Geesman, Commissioner  
Jackalyne Pfannenstiel, Commissioner  
Arthur Rosenfeld, Commissioner  
Scott Tomashefsky, Adviser